

**WHAT IS CLAIMED IS:**

1. A camera usable for capturing images of scenes illuminated by ambient light, said camera comprising:

a body;

an electronic imager disposed in said body, said electronic imager capturing an ambient light image as a multicolored electronic image;

a color detector disposed in said body, said color detector measuring said ambient light to provide a color value;

a look-up table is disposed in said body, said look-up table having said color value assigned to one of a designated illuminant and one or more non-designated illuminants, each said non-designated illuminant having a color cast relative to said designated illuminant; and

a user interface disposed on the outside of said body, said user interface showing said electronic image and an indication of said illuminant to which said color value is assigned.

2. The camera of claim 1 wherein said color detector has three subdetectors, each said subdetector having a maximal spectral responsivity at a different color of said ambient light, and said color value is trichromatic.

3. A camera usable for capturing images of scenes illuminated by ambient light, said camera comprising:

a body;

a display disposed on the outside of said body;

an electronic imager disposed in said body, said electronic imager capturing an ambient light image as a multicolored electronic image;

a color detector disposed in said body, said color detector measuring said ambient light to provide a color value;

a look-up table, disposed in said body, said look-up table having said color value assigned to one of a designated illuminant and one or more non-

designated illuminants, each said non-designated illuminant having a color cast relative to said designated illuminant;

a control system transferring said electronic image to said display, said control system color balancing said electronic image to impart a color cast relative to said designated illuminant and relative to said illuminant assigned to said color value, when said illuminant assigned is one of said non-designated illuminants.

4. The camera of claim 3 including an archival capture media color balanced to said designated illuminant.

5. The camera of claim 3 wherein said relative color casts each correspond to a reduction in correlated color temperature.

6. The camera of claim 3 wherein at least one of said reference illuminants has a correlated color temperature of less than 5000 degrees Kelvin.

7. The camera of claim 3 wherein said color detector is operatively connected to said imager and measures a color value of said electronic image.

8. The camera of claim 3 further comprising a ambient light sensor mounted to said body, said ambient light sensor being operatively connected to said color detector and independent of said imager.

9. A camera usable for capturing images of scenes illuminated by ambient light, said camera comprising:

a body;

an electronic imager disposed in said body, said electronic imager capturing an ambient light image as a multi-colored electronic image;

a color detector disposed in said body, said color detector measuring a color value of said electronic image;

a look-up table, disposed in said body, said look-up table having said color value assigned to one of a plurality of reference illuminants to provide an assigned reference illuminant, each said reference illuminant having a different correlated color temperature;

a control system color balancing said electronic image to the correlated color temperature of said assigned reference illuminant to provide a verification image;

a display disposed on the outside of said body, said display showing said verification image.

10. The camera of claim 9 wherein at least one of said reference illuminants has a correlated color temperature of less than 5000 degrees Kelvin.

11. The camera of claim 9 further comprising a film capture unit mounted in said body, a optical system directing said ambient light image to said film capture unit and said electronic imager, and a shutter release mounted on said body, said shutter release being selectively actuatable to concurrently direct said ambient light image to said film capture unit and said electronic imager.

12. The camera of claim 11 wherein one or more of said reference illuminants are each equal to a correlated color temperature of an illumination source partially normalized by a predetermined photofinishing color cast reduction for that illumination source.

13. The camera of claim 9 wherein said electronic image is pixelated and said color detector includes a digital color sampling circuit sampling a plurality of pixels of said electronic image.

14. The camera of claim 13 wherein said electronic image includes three subimages, each said subimage having a different color, and said digital color sampling circuit samples the brightest pixels of said subimages.

15. The camera of claim 9 wherein said electronic capture unit further comprises an array imager and a filter disposed over said imager.

16. The camera of claim 9 wherein said color detector samples said electronic image.

17. The camera of claim 9 further comprising a film capture unit mounted in said body.

18. A camera usable for capturing images of scenes illuminated by ambient light, said camera comprising:

a body;

an electronic image capture unit disposed in said body, said electronic image capture unit capturing an ambient light image as a three-colored electronic image;

a color detector disposed in said body, said color detector measuring a color value of said ambient light;

a look-up table, disposed in said body, said look-up table having said color value assigned to one of a plurality of reference illuminants to provide an assigned reference illuminant, said reference illuminants including daylight and one or more non-designated illuminants having a correlated color temperature less than the correlated color temperature of daylight;

a control system operatively connected to said electronic image capture unit and said look-up table, said control system maintaining a color balance of said electronic image when said reference illuminant is daylight and color balancing said electronic image to a lower correlated color temperature

when said reference illuminant is one of said non-designated illuminants, to provide a verification image; and

a display disposed on the outside of said body, said display showing said verification image.

19. The camera of claim 18 wherein said decreasing of said color temperature of said electronic image is proportional to and opposite a white balance correction of said electronic image from the color temperature of said assigned reference illuminant to daylight.

20. The camera of claim 19 wherein one or more of said reference illuminants are each equal to a correlated color temperature of an illumination source partially normalized by a predetermined photofinishing color cast reduction for that illumination source.

21. The camera of claim 20 further comprising a film capture unit mounted in said body, and a optical system directing said ambient light image to said film capture unit and said electronic image capture unit.

22. An image capture method usable in ambient light, comprising the steps of:

capturing an ambient light image as an electronic image in a camera;

measuring an ambient light color value;

matching said ambient light color value to one of a designated illuminant and one or more non-designated illuminants to provide an assigned illuminant, each said non-designated illuminant having a color cast relative to said designated illuminant;

transferring said electronic image to a display;

during said transferring, color balancing said electronic image to impart a color cast relative to said designated illuminant and relative to said assigned illuminant, when said assigned illuminant is one of said non-designated illuminants.

23. The method of claim 22 further comprising capturing said ambient light image on archival capture media color balanced to said designated illuminant.

24. The method of claim 22 wherein said measuring further comprises sampling said electronic image.

25. The method of claim 22 further comprising changing said ambient light between said capturing and said measuring of said ambient light.

26. The method of claim 22 further comprising, prior to said transferring, calibrating said electronic image to said display.

27. A method for capturing images of scenes illuminated by ambient light, said method comprising the steps of:

capturing an ambient light image as an electronic image in a camera;

measuring a color value of said electronic image;

matching said color value to one of a plurality of reference illuminants to provide an assigned reference illuminant, each said reference illuminant having a different correlated color temperature;

color balancing said electronic image to the correlated color temperature of said assigned reference illuminant to provide a verification image;

showing said verification image.

28. The method of claim 27 further comprising capturing said ambient light image on archival capture media color balanced to one of said reference illuminants.

29. The method of claim 28 wherein one or more of said reference illuminants are each equal to a correlated color temperature of an illumination source partially normalized by a predetermined photofinishing color cast reduction for said archival capture media and the respective said reference illuminant.

30. The method of claim 27 wherein said measuring further comprises sampling said electronic image.

31. The method of claim 27 further comprising, prior to said showing, calibrating said electronic image to said display.

32. The method of claim 27 wherein said capturing further comprises filtering said ambient light image into three differently colored subimages.

33. The method of claim 32 wherein said measuring further comprises sampling each of said subimages.

34. The method of claim 27 further comprising capturing a latent film image concurrent with said capturing of said electronic image.

35. The method of claim 34 wherein one or more of said reference illuminants are each equal to a correlated color temperature of an illumination source partially normalized by a predetermined photofinishing color cast reduction for that illumination source.

36. An image capture method usable in ambient light, comprising the steps of:

capturing an ambient light image as an electronic image in a camera;

measuring a color value of said electronic image;

matching said color value to one of a plurality of reference illuminants to provide an assigned reference illuminant, each said reference illuminant having a different correlated color temperature;

duplicating said electronic image to provide first and second copies;

color balancing said first copy of said electronic image to the correlated color temperature of said assigned reference illuminant;

color balancing said second copy of said electronic image differently than said first copy of said electronic image;

showing said first and second copies of said electronic image on a display mounted to said camera.

37. The method of claim 36 wherein said showing further comprises displaying said first and second copies in selective alternation.

38. The method of claim 36 further comprising showing said first copy during a time period following said capturing and said showing said second copy after the end of said time period.

39. The method of claim 38 further comprising deleting said first copy following said time period.

40. The method of claim 38 further comprising selectively showing said second copy during said time period.



41. The method of claim 36 further comprising, prior to said showing, calibrating said copies to said display.

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